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10/759,705	01/15/2004	Billy Keefer	019287-0319645	8442
909 7590 03/30/2009 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102				
EXAMINER				
TANG, KARIN C				
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2451				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/759,705

**Applicant(s)**

KEEFER ET AL.

**Examiner**

KAREN C. TANG

**Art Unit**

2451

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

- This action is responsive to the amendment and remarks file on 12/29/08.
- Claims 1-32 are presented for further examination.
- Claims 28-32 are newly entered.
- Amended to the Specification filed on 09/22/08 is entered.

### **DETAILED ACTION**

#### ***Response to Arguments***

Applicant's arguments filed 4/17/08 have been fully considered but they are not persuasive.

Applicant argues that Malik fails to teach or suggest the amended limitations.

Examiner disagrees.

It is the combination of Malik in view of Norman that disclosed the amended limitations: memory operable to store information associated with a plurality of network devices (plurality of devices information, refer to Col 2, Lines 11-14) discovered in the enterprise network (refer to Col 2, Lines 24-26 and keep track of topological information, refer to Col 4, Lines 55-67), the information stored in the memory comprising a plurality of agent templates corresponding to the discovered network devices (plurality of model information, refer to Col 2, Lines 10-15), each of agent templates associated with a class of network devices (model is associated with the devices in network, refer to Col 2, Lines 10-15) and comprising a definition (each model is associated with certain configuration of records, refer to Col 2, Lines 20-25) of that class of network devices (multiple records can be created plurality of devices, refer to Col 2, Lines 20-27); one or more processor collectively operable to:

select one of the network devices in the enterprises network as a network device to be monitored (select a router, refer to Col 6, Lines 40), the selected network device having plurality of characteristics that include at least a class of the selected network devices (attributes representing characteristics, refer to Col 2, Lines 25-33);

selecting one of the plurality of agent template based on the class of the selected network device (select a model, refer to Col 6, Lines 50-67), the selected agent template comprising object class (model comprising class, refer to Col 2, Lines 35-45), that defines possible combinations of the characteristics for the network devices in the class of the selected network device (refer to Col 2, Lines 20-35);

instantiating an agent object from the object class of the agent template (create configuration refer to Col 7, Lines 54-61), the instantiated agent object operable to monitor the selected network device (abstracts, refer to Col 3, Lines 1-8); the device is a switch (refer to Col 1, Lines 25-28)

Although Malik disclosed the invention substantially as claimed, Malik did not explicitly teaches "monitor hardware characteristics of the network device; and agent templates comprising a hierarchical definition of the network device "

Norman, in analogues art, disclosing "monitor hardware characteristics of the network device (refer to Col 12, Lines 59-68 and Col 14, Lines 17-20); and agent templates comprising a hierarchical definition of the network device (refer to Col 26, Lines 30-65)"

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman's teaching of "monitor hardware characteristics of the network device; and agent templates comprising a hierarchical definition of the network

device" would improve Malik's system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

Therefore, the argument is not persuasive.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-16 recites the limitation "computer-readable medium" in Claim 9, Lines 1.

There is insufficient antecedent basis for this limitation in the claim.

Correction is required.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 9-16, the claims and the supporting portions of the specification only have software elements (e.g., memory that is "storage component" which appear to be a software framework, a processor which could be a "software process"). Therefore, claims 9-16 does not classify into any of the four statutory, and is rejected under USC 101.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-13, 16-21, and 24-27 are rejected under 35 U.S.C. 103(a) as being obvious over Malik et al hereinafter Malik et al hereinafter Malik (US 6,349,306) in view of Norman et al hereinafter Norman (US 5,546,595).

1. Referring to Claims 1, 9, 17 and 25, Malik teaches an agent-based monitoring of network devices in an enterprise network with means for:

memory operable to store information associated with a plurality of network devices (plurality of devices information, refer to Col 2, Lines 11-14) discovered in the enterprise network (refer to Col 2, Lines 24-26 and keep track of topological information, refer to Col 4, Lines 55-67), the information stored in the memory comprising a plurality of agent templates corresponding to the discovered network devices (plurality of model information, refer to Col 2, Lines 10-15), each of agent templates associated with a class of network devices (model is associated with the devices in network, refer to Col 2, Lines 10-15) and comprising a definition (each model is associated with certain configuration of records, refer to Col 2, Lines 20-25) of that class of network devices (multiple records can be created plurality of devices, refer to Col 2, Lines 20-27); one or more processor collectively operable to:

select one of the network devices in the enterprises network as a network device to be monitored (select a router, refer to Col 6, Lines 40), the selected network device having plurality of characteristics that include at least a class of the selected network devices (attributes representing characteristics, refer to Col 2, Lines 25-33);

selecting one of the plurality of agent template based on the class of the selected network device (select a model, refer to Col 6, Lines 50-67), the selected agent template comprising object class (model comprising class, refer to Col 2, Lines 35-45), that defines possible combinations of the characteristics for the network devices in the class of the selected network device (refer to Col 2, Lines 20-35);

instantiating an agent object from the object class of the agent template (create configuration refer to Col 7, Lines 54-61), the instantiated agent object operable to monitor the selected network device (abstracts, refer to Col 3, Lines 1-8); the device is a switch (refer to Col 1, Lines 25-28)

Although Malik disclosed the invention substantially as claimed, Malik did not explicitly teaches "monitor hardware characteristics of the network device; and agent templates comprising a hierarchical definition of the network device "

Norman, in analogues art, disclosing "monitor hardware characteristics of the network device (refer to Col 12, Lines 59-68 and Col 14, Lines 17-20); and agent templates comprising a hierarchical definition of the network device (refer to Col 26, Lines 30-65)"

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman's teaching of "monitor hardware characteristics of the network device; and agent templates comprising a hierarchical definition of the network

device” would improve Malik’s system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

2. Referring to Claims 2, 10, and 18, the method of claim 1, the software of claim 9 and the system of claim 17, although the system disclosed by Malik shows substantial features of the claimed invention, Malik did not explicitly disclosing that “the network device associated with at least one Management Information Base (MIB) parameter.”

Norman, in analogues art, disclosing “the network device associated with at least one Management Information Base (MIB) parameter (refer to Col 6, Lines 50-67, and Col 7, Lines 1-15)”

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman’s teaching of “the network device associated with at least one Management Information Base (MIB) parameter” would improve Malik’s system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

3. Regarding Claims 3, 11, 19, and 26, the method of claim 1, the software of claim 9 and the system of claim 17, although the system disclosed by Malik shows substantial features of the claimed invention, it fails to disclose “the agent object monitoring the network device based on the a vendor identity, a model number, a product line, or the hardware characteristics.”

Norman, in analogues art, disclosing “the agent object monitoring the network device based on the a vendor identity, a model number, a product line, or the hardware characteristics (refer to Col 7, Lines 1-15)”

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman’s teaching of “the agent object monitoring the network device based on the a vendor identity, a model number, a product line, or the hardware characteristics” would improve Malik’s system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

4. Referring to Claims 4, 12, and 20, the method of Claim 1, the software of Claim 9 and the System of Claim 17, although Malik disclosed the limitations substantially as claimed, Malik did not explicitly disclosing “wherein monitoring comprising retrieving information associated with one or more of the hardware characteristics of the network device by retrieving information associated with one or more of the monitored hardware characteristics of the selected network device”

Norman, in analogues art, disclosing “the instantiated agent object operable to monitor hardware characteristics of the network device (refer to Col 2, Lines 55-67 and Col 3, Lines 1-15) by retrieving information associated with one or more of the monitored hardware characteristics of the selected network device (refer to Col 7, Lines 25-65);”

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman’s teaching of “the instantiated agent object

operable to monitor hardware characteristics of the network device by retrieving information associated with one or more of the monitored hardware characteristics of the selected network device” would improve Malik’s system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

5. Referring to Claims 5, 13, and 21, the method of Claim 4, the software of Claim 12 and the System of Claim 20, although Malik disclosed the limitations substantially as claimed, Malik did not explicitly disclosing "wherein the hardware characteristics of the network device including one or more of: memory usage; chassis temperature; Central Processing Unit (CPU) usage; fan status; module status; and power supply status.”.

Norman, in analogues art, disclosing "wherein the hardware characteristics of the network device including one or more of: memory usage; chassis temperature; Central Processing Unit (CPU) usage; fan status; module status; and power supply status.(model status, refer to Col 8, Lines 15-25);”

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman’s teaching of “wherein the hardware characteristics of the network device including one or more of: memory usage; chassis temperature; Central Processing Unit (CPU) usage; fan status; module status; and power supply status” would improve Malik’s system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

6. Referring to Claims 8, 16, 24, 28, 29, 30, 31. and 32, the method of Claim 1, the software of Claim 9 and the System of Claim 17, although Malik disclosed the invention substantially as claimed, Malik is silent in regarding “wherein the hierarchy of object classes for the selected agent template includes a network addressable unit class that defines the class of the selected network device and an agent level class that defines a root class, the agent level root class having parent clause declaration referencing network addressable unit class”

Norman, in analogous art, disclosing “wherein the hierarchy of object classes for the selected agent template includes a network addressable unit class that defines the class of the selected network device and an agent level class that defines a root class, the agent level root class having parent clause declaration referencing network addressable unit class (refer to Col 26, Lines 30-67)”

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman’s teaching of “wherein the hierarchy of object classes for the selected agent template includes a network addressable unit class that defines the class of the selected network device and an agent level class that defines a root class, the agent level root class having parent clause declaration referencing network addressable unit class” would improve Malik’s system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

7. Referring to Claim 27, Malik and Norman disclosed the method of Claim 25, Malik further discloses wherein the selected one of the plurality of agent templates includes transmitting using SNMP a request for database form the selected switch (refer to Col 4, Lines 55-67); and utilizing the database object to identify the class of the selected switch in a class table contains a list of the discovered switch wherein selected agent templates comprises a class definition for the class identified in the class table (refer to Col 6, Lines 35-67);

Although the system disclosed by Malik shows substantial features of the claimed invention, Malik did not explicitly disclosing that “object is an MIB object”

Norman, in analogues art, disclosing “object is an MIB object (refer to Col 6, Lines 50-67, and Col 7, Lines 1-15)”

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman’s teaching of “object is an MIB object” would improve Malik’s system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

Claims 6, 7, 14, 15, 22, and 23 are rejected under 35 U.S.C. 103(a) as being obvious over Malik et al hereinafter Malik et al hereinafter Malik (US 6,349,306) in view of Norman et al hereinafter Norman (US 6,061,724) in further view of Ries et al hereinafter Ries (US 6,061,724)

8. Referring to Claims 6, 14, and 22, the method of Claim 4, the software of Claim 12 and the System of Claim 20, although Malik and Norman disclosed the limitations substantially as

claimed Malik and Norman did not explicitly disclosing “comparing a threshold value to the retrieved information associated with one or more of the hardware characteristics.”

Ries, in analogues art, disclosing "comparing a threshold value to the retrieved information associated with one or more of the hardware characteristics." (refer to Col 15, Lines 28-30)

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik and Norman with teaching of Ries because Ries's teaching of “comparing a threshold value to the retrieved information associated with one or more of the hardware characteristics” would improve Malik and Norman's system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

9. Referring to Claims 7, 15, and 23, the method of Claim 6, the software of Claim 15 and the System of Claim 22, although Malik disclosed the invention substantially as claimed, Malik did not explicitly disclosing “automatically communicating an alert in response to the hardware characteristics changes”

Norman, in analogous art, disclosing “automatically communicating an alert in response to the hardware characteristics changes (refer to Col 7, Lines 1-15)”

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik with teaching of Norman because Norman's teaching of “automatically communicating an alert in response to the hardware characteristics changes” would improve Malik's system by provide most updated information regarding to the physical configuration of plurality devices

within the network in order to expertise process when the re-configuration of the network devices occurs.

Although Malik and Norman disclosed the limitations substantially as claimed Malik and Norman did not explicitly disclosing “the changes is regarding with violating the threshold values.”

Ries, in analogues art, disclosing " the changes is regarding with violating the threshold values.” (refer to Col 15, Lines 28-30)

It would have been obvious to one of ordinary skill in the art to combine the teaching of Malik and Norman with teaching of Ries because Ries’s teaching of “the changes is regarding with violating the threshold values” would improve Malik and Norman’s system by provide most updated information regarding to the physical configuration of plurality devices within the network in order to expertise process when the re-configuration of the network devices occurs.

### ***Conclusion***

**Examiner’s Notes:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the

specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/K. C. T./  
Examiner, Art Unit 2451

/Larry D Donaghue/  
Primary Examiner, Art Unit 2454